

# **Virginia Wireless E-911 Services Board**

## **Guidelines for the Submission of Commercial Mobile Radio Service (CMRS) Costs Estimates for the Fiscal Year beginning July 1, 2004 and ending June 30, 2005**

**Adopted July 9, 2003**

### **Purpose**

The Virginia Wireless E-911 Services Board (the Board) has adopted these guidelines in accordance with Article 7, Chapter 15 of Title 56 of the *Code of Virginia*. The guidelines apply to commercial mobile radio system (CMRS) provider and govern the submission of cost estimates for the fiscal year beginning on July 1, 2004 and ending June 30, 2005 (FY 2005).

### **Introduction**

The FY2005 CMRS funding guidelines are a continuation of the guidelines used in previous years without modification.

### **Guidelines for CMRS Providers**

#### **General**

Payments from the Wireless E-911 Fund (the Fund), unless otherwise provided for in law, are limited under Article 7 to “direct” and “reasonable” costs associated with the provision of enhanced 911 services as defined under Federal Communications Commission Order 94-102. CMRS providers must file a cost estimate developed in accordance with these guidelines no later than December 31, 2003 to qualify for payments from the Fund during FY 2005.

No payments will be approved for costs prior to the receipt by the CMRS provider of a Phase I request for service. CMRS providers must specify which components of their cost estimates are considered confidential and protected as provided for in Article 7. Each CMRS provider submitting a cost estimate by December 31, 2003, will be invited to make a presentation of its cost estimate before a subcommittee of the Virginia Wireless E-911 Services Board as outlined in Article 7.

#### **Phase I**

The CMRS provider shall provide a detailed estimate of costs the CMRS expects to incur during FY 2004. A Cost Recovery Worksheet is attached as a guideline. The CMRS provider shall provide information based upon the cost recovery methodology it has chosen to use:

##### *Capitation*

CMRS providers, who have adopted a capitated cost recovery methodology, which calculates E-911 cost recovery as a fixed charge per subscriber based on billing address, shall provide:

- ◆ the fixed charge amount;
- ◆ the number of subscribers as of December 1, 2002 served in each area covered by the CMRS provider and the CMRS provider's resellers;
- ◆ an estimate of the rate of growth in subscribers in each PSAP service area;
- ◆ the basis of the fixed charge; and
- ◆ evidence of the reasonableness of the fixed charge. (If feasible, include a comparison of what the cost estimate would be if the carrier were to seek cost recovery based on actual Virginia costs.)

Payments based on these cost estimates shall be calculated separately for each PSAP. Payments shall be calculated by multiplying the fixed charge amount by the subscriber count on December 1, 2003 (inflated by the estimated subscriber growth rate). Payment amounts shall be prorated for the number of months between the expected PSAP Phase I request and June 30, 2005.

#### *Actual Costs*

CMRS providers, who have not adopted a "capitation" cost recovery method, shall provide a detailing of the estimated costs that the CMRS expects to incur during FY 2005. The estimate shall be based on:

- ◆ the schedules for each PSAP in the CMRS service area; and
- ◆ the point of interconnection agreed upon by the PSAP and the CMRS provider.

The Board may in its discretion require appropriate documentation supporting all costs. The CMRS provider must show how individual costs have been prorated to reflect the differing PSAP schedules.

#### *Combination*

CMRS providers may opt to use a combination of the two cost recovery methods. Capitation may be used for costs incurred per subscriber, such as third party provider cost. Using actual costs may be most appropriate for costs that do not fluctuate with the number of subscribers, such as trunking costs.

### **Phase II**

#### *FCC Compliance*

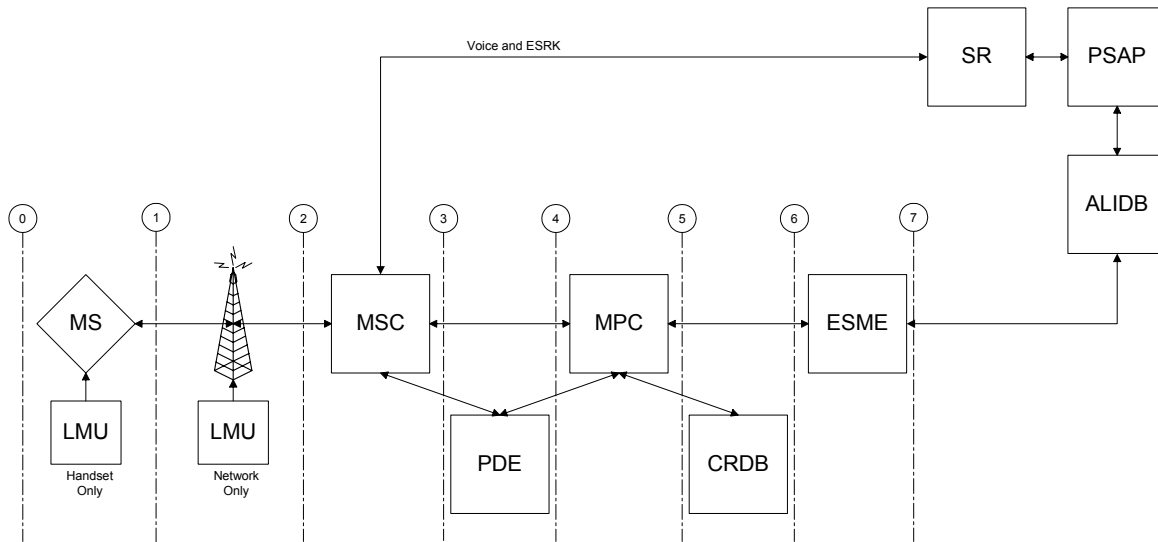
Any Phase II solution funded by the Wireless E-911 Services Board must meet or exceed the accuracy requirements as established or amended in the FCC proceeding 94-102. Systems found not to be compliant with this requirement will not be eligible for funding.

#### *Phase I Costs*

After receiving a request for Phase II service from a PSAP, a CMRS provider shall still be eligible for all associated Phase I costs. The following guidelines for Phase II cost recovery should be viewed as being in addition to any Phase I costs already being received by the CMRS provider.

### *Infrastructure Components*

The Board shall provide funding for the reasonable CMRS provider costs of the following infrastructure components of Phase II service (as defined in J-STD-036 and illustrated in the network diagram below): Mobile Switching Center (MSC); Mobile Positioning Center (MPC); Position Determining Entity (PDE); Coordinate Routing Database (CRDB); and Emergency Service Message Entity (ESME).



To assist the Subcommittee with the evaluation of the funding submissions, any CMRS provider wishing to receive funding for Phase II implementation must submit a detailed proposal, including costs, for the implementation of Phase II in all areas of the Commonwealth served by the CMRS provider.

Again, CMRS providers must specify which components of their cost estimates are considered confidential and protected as provided for in Article 7.

### *Location Measurement Units (LMU)*

The Board will not provide funding or subsidies for the cost of the location measurement units whether part of a handset or network based solution.

### *Service Provider Based Solutions*

The Board will provide reasonable funding for the provision of Phase II service through the use of a service provider so long as the service provider is supplying components that are otherwise eligible for funding.

### *National Solutions*

CMRS Providers proposing solutions that will provide service to an area larger than Virginia (i.e. a national MPC) must prorate the cost of the shared components based on the percentage of subscribers that are served by the component that are in Virginia.

### *Economies of Scale*

CMRS Providers are encouraged to look at ways of reducing the overall cost or implementation time for the Phase II solution. As an example, if cell site calibration needs to be done in an area before Phase II can be implemented and it saves time or money to calibrate all site in a particular region at one time even though not all PSAP in that region have made a service request, the CMRS provider should propose calibrating all sites in the region.

### **Funding Request Worksheet**

Any CMRS provider intending to implement wireless enhanced 9-1-1 Phase I or Phase II is strongly encouraged to submit a funding request to the Board. The Wireless E-911 CMRS Funding FY2005 Request/Report Worksheet (attached) has been designed to simplify the process of applying for funding for wireless E-911 improvements. The worksheet supports both the application for grant funds prior to the beginning of a fiscal year and also is used for the “true-up” process at the close of the same fiscal year.

The Worksheet is composed of two areas that are compiled to complete the form. They consist of the following:

1. Non-recurring costs (NRC)
2. Monthly Recurring Costs (MRC)

To the right of each area are two boxes, one titled “Estimated Cost” and one titled actual cost. Only the box titled “Estimated Cost” should be filled in for the grant application. The “Actual Cost” box is left blank until the true-up process (discussed below) at the completion of the fiscal year.

Items listed in each section should be itemized to allow the Board to fully understand the extent of the request. Items listed simply as “software” or “maintenance” will not be acceptable. Greater detail or explanation is necessary, such as “software upgrade to MPC to allow 20-digit processing” or “maintenance of MPC equipment”, to allow the Board to determine if the request falls within these guidelines.

#### **NRC**

In this section, list any one-time costs required to implement wireless enhanced 9-1-1. Any costs associated with Phase II implementation should be included in the list, but should be identified as Phase II costs. Total the list of items to the top of the section.

#### **MRC**

In this section, list any monthly or recurring costs required to implement wireless enhanced 9-1-1. Any costs associated with Phase II implementation should be included in the list, but should be identified as Phase II costs. Total the list of monthly costs to the top of the section. The total should be annualized to reflect the total estimated cost for the year.

## **Submission Instructions**

After completing the worksheet and totaling the costs to the top of the form, mail, fax or email it to the Board. Include with the submission the information listed above, if a Phase II request is being made.

The deadline for submission for the FY2005 period is December 31, 2003. However, this deadline is only significant if sufficient funding is not available to all requests. In such a case, the available funding is prorated among all of the requests received by December 31. By Virginia Code, the Board must consider funding requests received after that date to the extent there is available funding.

## **Approval Process**

The Board's CMRS Funding Subcommittee will review each request and make a recommendation to the full Board for approval. The Subcommittee may remove specific items before an approval is given. The full Board will act on the funding requests by March 1, 2004 so that the provider will know their funding level prior to the start of the fiscal year.

## **Distribution of Funding**

The Board will not disburse any funding until billed by the CMRS provider. The CMRS provider must invoice the Board quarterly referencing any actual costs incurred during the quarter. Supporting documentation for the costs such as copies of invoices, etc. should accompany the invoice to the Board to provide evidence that the cost has in fact been incurred.

## **True-up Process**

Each CMRS provider filing a cost estimate and receiving payments during FY 2005 pursuant to these guidelines must file a statement of actual costs incurred during FY 2005 with the Board no later than September 1, 2005. Where appropriate, the CMRS provider must submit copies of paid invoices, purchase orders or other evidence of how the funding was expended. The actual equipment purchased may vary from that approved by the Board. So long as the actual equipment is still allowable under these guidelines, the Board may provide funding. The Board does not true-up on an item by item basis but rather only compares the bottom line funding received versus the amount actually expended to implement wireless E-911.

Payments received in excess of the approved costs shall be refunded to the Board or credited to qualifying payments in subsequent years on such schedules as the Board may determine.

During this true-up period, if a Phase II solution was implemented, it will be tested by the Board to ensure compliance with the FCC order. If found to be non-compliant, the CMRS provider will be given an opportunity to correct the problem. The cost to retest the system will be borne by the CMRS provider. In order to have a statistically valid test, the test may be conducted regionally to ensure that sufficient test points are available.

### **Amendment of these Guidelines**

The Board reserves the right to adopt such amendments to these guidelines as may be necessary to implement Article 7. CMRS provider are strongly encouraged to suggest changes they feel may be appropriate to improve the implementation of Phase I and Phase II service.

# Wireless E-911 CMRS Funding FY2005 Request/Report Worksheet

**CMRS Provider:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Funding Type	Estimate	Actual	Difference
Monthly Recurring Cost			
Non-Recurring Cost			
Total			

### Monthly Recurring Cost Detail

[illegible]

### Non-Recurring Cost Detail

[illegible]